

from said conductive part to a second position where said membrane is flexed and said conductive portion is adjacent said conductive part, including the steps of:

causing said first and second sections to engage said base section during movement of said membrane toward said second position before said membrane reaches said second position; and

thereafter flexing a central portion of said membrane disposed between said first and second sections thereof to effect movement of said conductive portion to said position adjacent said conductive part.

21. (Currently Amended) A method of switching through use of a switch which includes a base section, an electrically conductive part supported on said base section, and a membrane having first and second ends respectively supported at spaced first and second locations on said base section, and having an electrically conductive portion disposed between said first and second ends thereof, comprising the steps of:

configuring said membrane to include spaced first and second sections that are disposed between said first and second ends of said membrane on opposite sides of said conductive portion and that each serve as resilient structure which is capable of yieldably varying in size in a direction lengthwise of said membrane;

10 configuring said membrane to include outer portions that each extend a selected distance outwardly from a respective one of said first and second sections to a respective one of said first and second locations and that are each free of physical coupling to said base section except at a respective one of said first and second locations;

responding to an applied voltage between said conductive part and said conductive portion by resiliently flexing said membrane so that said membrane moves from a first position where said membrane is unflexed and said conductive portion is spaced from said conductive part to a second position where said membrane is flexed and said conductive portion is adjacent, said conductive part said outer portions each extending in a direction which is approximately normal to a direction of movement of said conductive portion; and

20 ~~A method according to Claim 15, including the step of effecting application of said applied voltage between said electrically conductive part and said electrically conductive portion by applying there-between a first voltage which effects movement of said membrane from said first position to said second position, and thereafter applying there-between a second voltage~~
therebetween
therebetween

(cl. 39 cont.)

configuring said membrane to include spaced first and second sections that are disposed between said first and second ends of said membrane on opposite sides of said conductive portion and that each serve as resilient structure which is capable of yieldably varying in size in a direction lengthwise of said membrane;

10 configuring said membrane to include outer portions that each extend a selected distance outwardly from a respective one of said first and second sections to a respective one of said first and second locations and that are each free of physical coupling to said base section except at a respective one of said first and second locations;

responding to an applied voltage between said conductive part and said conductive portion by resiliently flexing said membrane so that said membrane moves from a first position where said membrane is unflexed and said conductive portion is spaced from said conductive part to a second position where said membrane is flexed and said conductive portion is adjacent said conductive part;

20 configuring said membrane so that said first and second sections each include a membrane section which extends transversely of said membrane and which has approximately a U-shaped^{profile};

causing each of said first and second portions of each said membrane section to tilt with respect to said third portion thereof in response to the application to said membrane of one of a lengthwise expansion force and a lengthwise contraction force; and

effecting one of expansion and contraction of each of said first and second sections in response to application to said membrane of one of a lengthwise expansion force and a lengthwise contraction force.